Genes May Extend Fertility in Some Women

TUESDAY, June 21 (HealthDay News) -- A genetic subset of women over 45 years of age may have a little more time left on their biological clock in terms of conception than other women, a new Israeli study finds. Generally, women over 45 are not fertile, due to aging of the ovaries.

The researchers studied a group of 250 women over age 45 who'd conceived naturally.

"Mostly they had had a large number of children and also a low miscarriage rate, and these two factors indicated to us that they had a natural ability to escape the aging process of the ovaries," Dr. Neri Laufer, Haddassah University Hospital, Jerusalem, said in a prepared statement. "We decided to see if we could find any differences in gene expression between eight such women and another six women of the same age group who had finished their families at the age of 30."

He and his colleagues found that the eight women had a unique pattern of gene expression not found in the six women in the control group. The two main groups of genes expressed in the eight women are involved in apoptosis (cell death) and in DNA repair mechanisms.

"These women appear to differ from the normal population due to a unique genetic predisposition that protects them from the DNA damage and cellular aging that helps age the ovary. What we do not yet know is whether this reproductive success is linked with potential longevity," Laufer said.

This research might help scientists develop better infertility treatments for older women and could provide a better understanding of the aging process.

The study was presented Tuesday at the annual conference of the European Society of Human Reproduction and Embryology in Copenhagen.

-- Robert Preidt

SOURCE: European Society of Human Reproduction and Embryology, news release, June 21, 2005